

REMARKS

Claims 1, 2, 4-13, 15-24, and 26-36 are pending. Claims 1, 4, 13, 15, 24, and 26 have been amended. New claims 35 and 36 have been added. Claims 3, 14, and 25 have been cancelled. No new matter has been introduced. Reexamination and reconsideration of this application is respectfully requested.

In the July 15, 2004 Office Action, the Examiner rejected claims 1-34 under 35 U.S.C. §103(a) as being obvious over the book “Visual Modeling with Rational Rose 2000 and UML,” ISBN: 0-201-69961-3, by Quatrani (“Quatrani”) in view of the online brochure “Accelerating Embedded e-development” located at <www.ghs.com/partners/rational/rose-rt.pdf> (“Accelerating”). This rejection is respectfully traversed.

The Quatrani and Accelerating references

Quatrani discloses visual modeling within the Rational Rose family of products. Quatrani discloses visual modeling within the Rational Rose family of products and use of Universal Markup Language (“UML”). Quatrani also discloses the Rational Unified Process, which is an extensive set of guidelines that address the technical and organizational aspects of software development focusing on requirements analysis and design. The Examiner stated that Quatrani further discloses “preparing an analysis model, ... preparing a design model, ... [and] generating software code for the application from the design model, the software code including at least a portion that is automatically generated using a software development tool”.

The Examiner stated that the automatic generation of software code is disclosed on page 13, where Quatrani sets forth: “Structuring the project along the process component dimension includes the following activities: ... Implementation – the production of the code that will result in an executable system.” With respect to design models, the Examiner stated that Quatrani

discloses a design manual that defines static relationships and dynamic behavior of objects. For this proposition, the Examiner referred to a passage in Quatrani, which recites: “[u]se cases and scenarios provide a way to describe system behavior; that is, the interaction between objects in the system... A statechart diagram shows the states of a single object, the events or messages that cause a transition from one state to another, and the actions that result from a state change.”

The Examiner noted that Quatrani *does not disclose* a method for generating real-time embedded software code for an application. However, the Examiner stated that Accelerating does disclose such real-time method. Specifically, Accelerating discloses: “[Rational Rose RealTime] enhances the power of industry standard UML with a real-time profile optimized for the unique problems of concurrency and distribution.... A UML model compiler generates complete C and C++ applications for UNIX, Windows NT/2000, and real-time operating system targets. This automated code generation eliminates the need for manual translation and avoids costly design interpretation errors.” The Examiner also stated that it would have been obvious to a person of skill in the art at the time the invention was made to combine the references in the direction of the claims.

Claims 1 - 34

Claims 1-34 all contain, either directly or indirectly (via incorporation by reference), at least the distinguishing limitations discussed below. Representative independent claim 1 recites (with emphasis added):

1. A method for generating real-time embedded software code **for a game of chance**, comprising:
 - preparing an analysis model **for the game of chance**, the analysis model describing functionality to be included in the software code;
 - preparing a design model **for the game of chance**, the design model including a plurality of objects for realizing the functionality in the analysis model, wherein the design model defines static relationships between the objects and dynamic behavior of the objects; and

generating software code **for the game of chance** from the design model, the software code including at least a portion that is automatically generated **in real-time** using a software development tool, **wherein the automatically generated portion of the software code includes the static relationships between the objects and the dynamic behavior of the objects.**

Neither Quatrani nor Accelerating, alone or in combination, disclose, teach, or suggest the automatic generation of software code in real-time, where the automatically generated portion includes static relationships between the objects and the dynamic behavior of the objects. Quatrani discloses visual modeling, but does not disclose the *automatic generation* of software code.

Applicants note that the Examiner's reliance on Accelerating seems to be placed primarily on the article's use of the words "real-time" when referring to operating system targets. However, as with Quatrani, Accelerating does not disclose anything about the *automatic generation* of software code in *real-time*, where the automatically generated portion includes *static relationships* between the objects and the *dynamic behavior* of the objects. Specifically, although Accelerating discloses a real-time *operating system target*, it discloses nothing about *automatic generation* of software code in real-time. Moreover, it also lacks teaching of an automatically generated portion of code including the static relationships between objects the dynamic behavior of the objects.

Quatrani and Accelerating also fail to disclose, teach, or suggest anything even tangentially related to a *game of chance*. More specifically, neither reference discloses, teaches, or suggests preparing an analysis model for a *game of chance*, preparing a design model for the *game of chance*, or generating software code for the *game of chance*.

Accordingly, applicants respectfully submit that claims 1-34 distinguish over Quatrani, alone or in combination with Accelerating.

New Claim 35

Claim 35 also distinguishes over Quatrani, alone or in combination with Accelerating.

Claim 35 recites (with emphasis added):

35. A method for generating real-time embedded software code **for a game of chance**, comprising:
preparing an analysis model **for the game of chance...**;
preparing a design model **for the game of chance...**;
generating software code **for the game of chance...**, the software code including at least a portion that is **automatically generated in real-time** using a software development tool; and
modifying the design model and automatically modifying the software code in response to modifying the design model.

Claim 35 contains distinguishing limitations directed to (a) the automatic generation of software code in real-time, and (b) preparation analysis and design models for a game of chance or generation of software code for the game of chance, that is similar to those discussed above with respect to claims 1-34. Moreover, the claimed modifying of the design model and *automatically modifying the software code in response to the modifying of the design model* is not disclosed, taught, or suggested by either Quatrani or Accelerating. The Examiner noted that Quatrani discloses that the Rational Rose Tool provides the capability to “use round-trip engineering facilities to keep your designs synchronized with your code.” However, Quatrani does not disclose, teach, or suggest the *automatic modification* of software code in response to modifying the design model. This limitation allows for the automatic synchronization of the design model and the software code regardless of which one is modified. Instead, Quatrani discloses only the reverse (i.e., synchronizing the design model with the code), and does not teach that this modification is done “automatically.” Accordingly, new claim 35 would distinguish over a combination of Quatrani and Accelerating.

New Claim 36

Claim 36 also distinguishes over Quatrani, alone or in combination with Accelerating.

Claim 36 recites (with emphasis added):

36. A method for generating real-time embedded software code **for a game of chance**, comprising:
preparing an analysis model **for the game of chance ...**;
preparing a design model **for the game of chance...**;
generating software code **for the game of chance...**, the software code including at least a portion that is **automatically generated in real-time** using a software development tool; and
modifying the software code and automatically modifying the design model in response to modifying the software code..

Claim 36 contains distinguishing limitations directed to (a) the automatic generation of software code in real-time, and (b) preparation analysis and design models for a game of chance or generation of software code for the game of chance, that is similar to those discussed above with respect to claims 1-34. Moreover, the claimed modifying of the design model and automatically modifying the software code in response to the modifying of the design model in response to the modifying of the software code is not disclosed, taught, or suggested by either Quatrani or Accelerating or reasons similar to those discussed above with respect to claim 35.

Conclusion

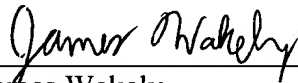
Applicants believe that the foregoing amendments place the application in condition for allowance, and a favorable action is respectfully requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Chicago telephone number (312) 425-3900 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference would advance prosecution of the application.

A check in the amount of \$176.00 is enclosed for the fees due in connection with the present Amendment and Reply. The Commissioner is authorized to charge any required fees while this application is pending (except the issue fee) to Jenkins & Gilchrist, P.C. Deposit Account No. 10-0447(47079-00105USPT).

Respectfully submitted,

JENKENS & GILCHRIST, P.C.

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